

# HISTORIC PROPERTY INVENTORY FORM

## IDENTIFICATION SECTION

**Field Site No.** 3708 **OAHP No.** \_\_\_\_\_ **Date Recorded** 12 Oct 1994  
**Site Name Historic** Transuranium Pilot Plant **Revised** 3 June 1997  
**Common** Radioanalytical Laboratory  
**Field Recorder** M.E. Crist, K.A. Simmons, I.C. Lindsay  
**Owner's Name** U.S. Department of Energy, Richland Operations Office  
**Address** P.O. Box 550  
**City/State/Zip Code** Richland, WA 99352

State of Washington, Department of Community Development  
Office of Archaeology and Historic Preservation  
111 21st Avenue Southwest, Post Office Box 48343  
Olympia, Washington 98504-8343 (206)753-4011

## Status

☒ Survey/Inventory  
☐ National Register  
☐ State Register  
☐ Determined Eligible  
☐ Determined Not Eligible  
☐ Other (HABS, HAER, NHL)  
☐ Local Designation

## Photography

**HCRL**  
Photography Neg. No. Roll 170, frames 23 & 24  
(Roll No. & Frame No.)  
View of N, W, & S exterior facades  
Date 12 Oct 1994

Photo at right: Roll 170, frame 23  
View of south and west facades

**Classification** ☐ District ☐ Site ☒ Building ☐ Structure ☐ Object  
**District Status** ☒ NR ☐ SR ☐ LR ☐ INV  
**Contributing** ☒ **Non-Contributing** ☐  
**District/Thematic Nomination Name** Hanford Site Manhattan Project and Cold War Era Historic District

## Description Section

### Materials & Features/Structural Types

**Building Type** Industry  
**Plan** Rectangular  
**Structural System** Concrete  
**No. of Stories** One

### Roof Type

☐ Gable ☐ Hip  
☒ Flat ☐ Pyramidal  
☐ Monitor ☐ Other (specify)  
☐ Gambrel  
☐ Shed

### Cladding (exterior Wall Surfaces)

☐ Log  
☐ Horizontal Wood Siding  
Rustic/Drop ☐  
Clapboard ☐  
☐ Wood Shingle  
☐ Board and Batten  
☐ Vertical Board  
☐ Asbestos/Asphalt  
☐ Brick  
☐ Stone  
☒ Stucco  
☐ Terra Cotta  
☐ Concrete/Concrete Block  
☐ Vinyl/Aluminum Siding  
☐ Metal (specify)  
☐ Other (specify)

### Roof Material

☐ Wood Shingle  
☐ Wood Shake  
☐ Composition  
☐ Slate  
☒ Tar/Built-up  
☐ Tile  
☐ Metal (specify)  
☐ Other (specify)  
☐ Not visible

### Foundation

☐ Log ☐ Concrete  
☐ Post & Pier ☐ Block  
☐ Stone ☒ Poured  
☐ Brick ☐ Other (specify)  
☐ Not visible

## Integrity

(Include detailed description in  
**Description of Physical Appearance**)

	Intact	Slight	Moderate	Extensive
Changes to plan	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to windows	<input type="checkbox"/> n/a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to original cladding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Changes to interior	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## LOCATION SECTION

**Address** Building 3708, 300 Area  
**City/Town/County/Zip Code** Richland/Benton County/99352  
**Twp. 10 N Range 28 E Section 11 1/4 Section NW 1/4 1/4 Sec**  
**Tax No./Parcel No.** \_\_\_\_\_ **Acreage** \_\_\_\_\_  
**Quadrangle or map name** Richland, Washington Quad. - 7.5 min. series, 1986  
**UTM References Zone 11 Easting 324460 Northing 5137860**  
**Plat/Block/Lot** 325310 5137820  
**Supplemental Map(s)** 325550 5136690  
324440 5136720



## High Styles/Forms (Check one or more of the following)

<input type="checkbox"/> Greek Revival	<input type="checkbox"/> Spanish Colonial Revival/Mediterranean
<input type="checkbox"/> Gothic Revival	<input type="checkbox"/> Tudor Revival
<input type="checkbox"/> Italianate	<input type="checkbox"/> Craftsman/Arts & Crafts
<input type="checkbox"/> Second Empire	<input type="checkbox"/> Bungalow
<input type="checkbox"/> Romanesque Revival	<input type="checkbox"/> Prairie Style
<input type="checkbox"/> Stick Style	<input type="checkbox"/> Art Deco/Art Moderne
<input type="checkbox"/> Queen Anne	<input type="checkbox"/> Rustic Style
<input type="checkbox"/> Shingle Style	<input type="checkbox"/> International Style
<input type="checkbox"/> Colonial Revival	<input type="checkbox"/> Northwest Style
<input type="checkbox"/> Beaux Arts/Neoclassical	<input type="checkbox"/> Commercial Vernacular
<input type="checkbox"/> Chicago/Commercial Style	<input type="checkbox"/> Residential Vernacular (see below)
<input type="checkbox"/> American Foursquare	<input checked="" type="checkbox"/> Other (specify)
<input type="checkbox"/> Mission Revival	Industrial Vernacular

## Vernacular House Types

<input type="checkbox"/> Gable Front	<input type="checkbox"/> Cross Gable
<input type="checkbox"/> Gable Front and Wing	<input type="checkbox"/> Pyramidal/Hipped
<input type="checkbox"/> Side Gable	<input type="checkbox"/> Other (specify)

## NARRATIVE SECTION

### Study Unit Themes (check one or more of the following)

<input type="checkbox"/>	Agriculture
<input type="checkbox"/>	Architecture/Landscape Architecture
<input type="checkbox"/>	Arts
<input type="checkbox"/>	Commerce
<input type="checkbox"/>	Communications
<input type="checkbox"/>	Community Planning/Development

<input type="checkbox"/>	Conservation
<input type="checkbox"/>	Education
<input type="checkbox"/>	Entertainment/Recreation
<input type="checkbox"/>	Ethnic Heritage (specify) _____
<input type="checkbox"/>	Health/Medicine
<input type="checkbox"/>	Manufacturing/Industry
<input type="checkbox"/>	Military

<input type="checkbox"/>	Politics/Government/Law
<input type="checkbox"/>	Religion
<input checked="" type="checkbox"/>	Science & Engineering
<input type="checkbox"/>	Social Movements/Organizations
<input type="checkbox"/>	Transportation
<input checked="" type="checkbox"/>	Other (specify) Cold War Era
<input checked="" type="checkbox"/>	<b>Study Unit Sub-Theme(s)</b> Research & Development

### Statement of Significance

Date of Construction 1948 Architect/Engineer/Builder \_\_\_\_\_

☒ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.

☒ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

The 3708 Radiation Measurements Building was built in 1948 to process personnel dosimeters. In the early 1960's, the building was an electrical and optical shop used for storage, maintenance, and development of electrical and optical instruments. Between 1967-1968, the structure was renovated as a transuranium pilot facility for use by Douglas United Nuclear. In 1968, neptunium oxide fuel targets were manufactured in a reduction process, then canned in aluminum for special plutonium-238 production tests in the 100-K Reactors. The following year, another experimental fuel blending neptunium oxide with graphite in pellet form was fabricated in the 3708 Building and irradiated in the 100-K Reactors. In the early 1970s, the north end of the 3708 Building was used for the experimental canning of americium oxide and curium oxide fuel blends to make special isotopes for medical and other scientific uses. The south end was being used for temporary plutonium storage. In 1984, a major renovation converted the southern part of the building to laboratories and office space in support of activities in the 320 and 329 Buildings. The research and development work that took place following the renovation of the 3708 Building was mostly non-radiological, wet laboratory work, though the two labs at the north end of the building continued to house some radiological projects. The building was abandoned and cleaned out in 1997. The 3708 Building played a significant role as a fuel fabrication support facility and research and development laboratory for both defense and non-defense programs. It is therefore the conclusion of the U.S. Department of Energy that Building 3708 is eligible for inclusion in the National Register of Historic Places under Criterion A as a contributing property within the Hanford Site Manhattan Project and Cold War Era Historic District.

### Description of Physical Appearance

Building 3708 is a rectangular, one story, concrete block structure measuring 74.5 feet long by 51.16 feet wide on a north-south axis. The building sits on a concrete foundation and has no windows. Stucco covers the exterior plywood panels that cover the original concrete block walls. The main entrance is through a vestibule on the south wall. Another set of doors on the southeast corner leads to the building's equipment room. The heaters, water treatment and air conditioning equipment, air compressors, vacuum pumps, and other maintenance equipment are shut down but are still inside the room. The major renovation of the building in 1984 (Project D-342) included restructuring of interior walls and the installation of fume heads and laboratory casework. Large gloveboxes used by Douglas United Nuclear to put nickel cladding on fuel target specimens in one of the laboratory spaces were removed the previous year to prepare for the renovation. The restrooms and change rooms in the southwest corner of the building were also modified to accommodate the renovation. The equipment room in the southeast part of the building was not modified. The interior plan of the 3708 Building since the 1984 renovation consists of a main north-south hallway down the middle of the building with three large laboratory/office spaces on each side of the hallway. Most of the equipment in the rooms was removed and the vents and utilities capped when the building was abandoned and cleaned out. Renovations to the building's exterior included the addition of the vestibule on the south wall and a covered gas storage area around an existing vestibule on the north wall. Former entrances on the west and south walls were sealed off.

**HISTORIC PROPERTY INVENTORY FORM**  
**Building 3708** (Continuation Sheet 1 of 1)

**Major Bibliographic References**

Battelle Facilities Administration. nd. *Facilities Catalog* . Battelle Pacific Northwest Laboratory, Richland, Washington.

Bjorklund, William (Battelle employee). 6 June 1997. Personal interview.

Drawings H-3-24366 and H-3-32676.

*Environmental Protection Evaluation for Radioanalytical Laboratories, 3708 Building: Project D-342* . nd. Richland, Washington.

Gerber, M.S. 1993. *Past Practices Technical Characterization study - 300 Area - Hanford Site* . Westinghouse Hanford Company, Richland, Washington.

Westinghouse Hanford Company. 1994. *300 Area Site Asset Catalog* . Richland, Washington.

Westinghouse Hanford Company. 1994. *Condition Assessment Survey Narratives, 3708 Building* . Richland, Washington.